sequence coding for hydroxynitrile lyase, which gene can be prepared from a primer combination based on the DNA sequence of the 5'-region of the *Prunus serotina mdl5* gene and of the *Prunus amygdalus* MDL1 gene, subsequent amplification with a DNA polymerase from organisms containing genes coding for hydronitrile lyase as templates and cloning, and which gene has the nucleotide sequence depicted in figure 1 or is at least 80% identical thereto.

B2

13. **(Amended)** A fusion protein or heterologous protein with hydroxynitrile lyase activity which can be prepared by using a DNA sequence of genes as claimed in claim 1, which codes for the signal peptide of a hydroxynitrile lyase of Rosacea species, and by secretory expression thereof in host cells.

B3

14. **(Amended)** The fusion protein as claimed in claim 13, wherein the fusion protein has the nucleic acid sequence depicted in figure 4, comprising sequences of the gene containing a DNA sequence coding for hydroxynitrile lyase, which gene can be prepared from a primer combination based on the DNA sequence of the 5'-region of the *Prunus serotina mdl5* gene and of the *Prunus amygdalus MDL1* gene, subsequent amplification with a DNA polymerase from organisms containing genes coding for hydronitrile lyase, as templates and cloning, and which gene has the nucleotide sequence depicted in figure 1 or is at least 80% identical thereto and the *Aspergillus* niger glucose oxidase gene, and also the amino acid sequence according to figure 5, which is derived from said nucleic acid sequence.

B4

17. **(Amended)** A process for preparing (R)- or (S)-cyanohydrins, which comprises reacting aliphatic, aromatic or heteroaromatic aldehydes and ketones with proteins as claimed in claim 7 in an organic, aqueous or 2-phase system or in emulsion in the presence of a cyanide group donor.

Please add the following new claims:

18. **(New)** The recombinant protein as claimed in claim 7, wherein the protein has the amino acid sequence derived from the nucleotide sequence of the gene containing containing a DNA sequence coding for hydroxynitrile lyase, which gene can be prepared from primers based on the DNA sequence of the 5'-region of the *Prunus serotina mdl1* gene, subsequent amplification with a DNA polymerase from organisms containing genes coding for hydronitrile lyase, as templates and cloning, and which has the nucleotide sequence depicted in figure 8 or is at least 80% identical thereto.

19. **(New)** A process for preparing (R)- or (S)-cyanohydrins, which comprises reacting aliphatic, aromatic or heteroaromatic aldehydes and ketones with proteins as claimed in claim 14 in an organic, aqueous or 2-phase system or in emulsion in the presence of a cyanide group donor.